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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Nagalakshmi Sreekantayya

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EXAMINER

CHAWLA, JYOTI

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,166	Applicant(s) SREEKANTAYYA ET AL.	
	Examiner JYOTI CHAWLA	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's submission filed on 7/26/2010 has been entered. Claims 1, 6-8 have been amended. Claims 1-3 and 5-14 are pending and examined in the current application.

Claim Rejections - 35 USC § 112

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejection of claims 1-3, 5-14 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter have been withdrawn based on applicant's amendments of 7/26/2010.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A) Claims 1-3, 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan (US 2001/0033880 A1) in view of Ravichandran (Food Chemistry, 2000), Furia (CRC handbook of food additives: 1980) and Janssen (2004/0115318).

The references and rejection are incorporated herein and as cited in the office action mailed March 24, 2010.

Applicant's amendments to claims clarify the claim language (overcome, 112 second rejection), but do not alter the scope of the claims. Thus the rejection of claims 1-3, 5-14 is maintained for reasons of record of 3/24/2010.

Response to Arguments

Applicant's arguments with respect to the amended claims have been considered but are not persuasive.

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i) Applicants argue that “The applicants respectfully submit that a *prima facie* case of obviousness cannot be established” applicants base this argument on the statement that “skilled artisan would not modify Ganesan in view of secondary references to achieve the presently claimed invention” (Remarks, page 5, lines 10-11). Applicants argue individual references by stating that “deficiencies of Ganesan, described herein. Ravichandran involves the lipid occurrence, distribution and degradation to flavor volatiles during tea processing at different stages of selected clones. There is no analysis of CTC teas prone to pacha taint or CTC teas containing pacha taint. Furia does not even mention tea, and any suggestion that Furia's "low-fat" or low-lipid food product extends to black tea is without basis. Furia describes "low-fat content" foods as encompassing "breakfast cereals, dehydrated potatoes and some cake mixes" as exemplary. (See Furia, page 208). A skilled artisan would not readily consider Furia's teachings to extend to tea.”

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Further in response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

Ganesan discloses a method of treating CTC teas wherein the teas are treated by diluting ascorbic acid to form a sprayable solution ([0025]). Ascorbic acid is a known antioxidant, thus addition of ascorbic acid fulfils the limitation of spraying antioxidant onto the tea after fermentation in a black tea manufacturing process (See Ganesan

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[0053], particularly sample 4 where the spraying is done after fermentation and before drying step ([0029])). Drying step of Ganesan is by applicant's preferred method and in the recited temperature range (Ganesan's drying step is performed at 135 C in a fluidized bed drier [0053]). The amount of antioxidant disclosed by Ganesan overlaps the claimed range. Ganesan does not disclose the use of the antioxidant is intended to prevent the development of pacha taint, however the problem was well known in the art at the time of the invention as disclosed by Ravichandran. Ravichandran discloses that during black tea manufacturing, a major cause of off flavors is the lipid oxidation of polyunsaturated fatty acids into C6 aldehydes and alcohols wherein the off -flavors include the 'Pacha Taint' problem during tea storage (Ravichandran Introduction) which is due to the accelerated autooxidation of lipids during CTC processing (page 13, first paragraphs). However, addition of antioxidants to retard oxidation or autooxidation of lipids was well known in the art. Further, ascorbic acid is a well known antioxidant, thus, method step of adding ascorbic acid to fermented tea, as taught by Ganesan would result in retardation of oxidation or autooxidation of lipids in tea, i.e., prevent development of "pacha taint", as claimed.

However, Ganesan does not explicitly disclose using the use of an emulsion of a synthetic antioxidant, such as, BHA. However, BHA was well known as an antioxidant and used for the same purpose in foods at the time of the invention, as disclosed by Furia. Since BHA and ascorbic acid both act as antioxidants, therefore, they would be regarded as functional equivalents and to include a known synthetic antioxidant (BHA) either in addition to or in place of ascorbic acid (another known antioxidant) would have been a matter of routine determination for one of ordinary skill and to substitute one antioxidant with another or to supplement one antioxidant with another antioxidant, based on the availability, desirability and /or cost of the antioxidants would have been well within the purview of one of ordinary skill in the art. Substituting one ingredient known for a specific function by another ingredient known for the same function does not impart patentable distinction to claims.

Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it

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that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

ii) In response to applicant's argument that Ravichandran, Furia and Jensen are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Ganesan, Furia and Ravichandran have already been discussed. Jenssen is being relied upon to show the conventionality of packaging tea products ([0092]) in pouches or bags (claim 13) made from LDPE ([0029]). It would have been obvious to one having ordinary skill in the art at the time of the invention to provide packaging such as that in Janssen in order to provide the tea product in packaging which does not interact with volatiles within the food ([0006]-[0011]).

iii) Applicant's argue that Ganesan does not apply to the claimed invention and applicants support their argument by stating that "Ganesan treats the tea with ascorbic acid during the initial stages of fermentation in order to improve the solubility. (See paragraphs [0031] to [0035]; [0036] to [0040]; [0041 to 0045]; [0046] to [0050]. Contrarily, the presently claimed process sprays the synthetic antioxidant emulsion *after fermentation* for the prevention of pacha taint in CTC teas. Importantly, In order to achieve the present invention, a skilled artisan would have to modify Ganesan to treat the tea with antioxidant *after* fermentation. This modification would alter the solubility characteristics of the tea such that Ganesan's process would be unsuitable for its intended use, since Ganesan needs to treat the tea *before* it has completely fermented in order to achieve the desired solubility." Applicant argument is not persuasive because

- Ganesan also discloses of addition of ascorbic acid "in a single or split doses...selectively prior to maceration and/or during maceration and/or

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the post maceration stages of the above processing of tea” (publication paragraph 33, last 6 lines). Thus ascorbic acid ,i.e., antioxidant, treatment to tea can be provided either before or during or after maceration step. fermenting and drying are process steps in tea manufacturing that occur post maceration and Ganesan does not teach against application of ascorbic acid after maceration step.

- Ganesan discloses of adding ascorbic acid after 30 minutes of fermentation (publication paragraph 53, last 5 lines), i.e., after fermentation.
- claim 1 as recites “A process...comprising ...spraying...on fermented tea material”, where the transitional term “comprising”, which is synonymous with “including,” containing,” is inclusive or open-ended and does not exclude additional, unrecited elements or method steps (see MPEP 2111). Thus, the claimed limitation of “fermented tea” is disclosed by Ganesan, paragraph 53 and the teaching of application of antioxidant after fermenting tea for 30 minutes, as taught by Ganesan, still reads on the claimed limitation.

iv) Applicant further argues that “a skilled artisan would not have substituted Ganesan's ascorbic acid with a synthetic antioxidant because a synthetic antioxidant is not a solubilizing agent, and substituting the synthetic antioxidant would render Ganesan unsuitable for its intended purpose” (Remarks, page 6, lines 6-9). This argument is not persuasive because a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case the addition of ascorbic acid in a method to process CTC teas will provide the antioxidant benefits of ascorbic acid to the product.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/
Examiner
Art Unit 1781

/Keith D. Hendricks/

Supervisory Patent Examiner, Art Unit 1781